AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1-33. (Cancelled)

34. (Currently Amended) A method of making an implantable medical apparatus ~~for forming a layer on at least a portion of a surface of a biocompatible medical device, the method~~ comprising:

attaching monomers to polysaccharides to make polysaccharide macromers and thereafter polymerizing the macromers in an organic solvent into a three-dimensional crosslinked hydrogel that either defines a hollow cylinder, wherein the cylinder is formed during polymerization of the polysaccharide macromers, or encapsulates an inert medical device in the hydrogel ~~contacting the surface of the medical device with a plurality of synthetic anionic polysaccharide polymers, with the polysaccharide polymers having an average length of at least two polysaccharides covalently bonded per polymer, to form the layer, wherein the polysaccharide polymers are formed by chemically reacting polysaccharide complexes in an organic solvent, the polysaccharide complexes comprising quaternary ammonium cations ionically bound to the polysaccharides and at least one functional group capable of forming a covalent bond~~.

35. (Cancelled)

36. (Cancelled)

37. (Cancelled)

38. (Original) The method of claim 34 wherein the polysaccharide is a W-MPSAC.

39. (Original) The method of claim 34 wherein the polysaccharide is an O-MPSAC.

40. (Cancelled)

41. (Currently Amended) The method of claim 34 wherein the polysaccharide polymers further comprise a ~~second~~ functional group for forming a covalent bond after the hydrogel ~~layer~~ is formed.

42. (Currently Amended) The method of claim 41 wherein the ~~first and/or second~~ functional group is a photoactivatable group.

43-48. (Cancelled)

49. (Previously Presented) The method of claim 34 wherein the organic solvent has a boiling point at atmospheric pressure of less than approximately 115 degrees Centigrade and a dielectric constant that is less than that of DMSO.

50-55. (Cancelled)

56. (Original) The method of claim 34 further comprising polymerizing monomers into the polysaccharide polymers.

57. (Original) The method of claim 34 wherein the polysaccharide polymers are formed in the presence of a solubilized a non-polysaccharide polymer.

58-60. (Cancelled)

61. (Previously Presented) The method of claim 34 wherein the polysaccharide polymer comprises a cross-linked structure or a branched structure.

62-63. (Cancelled)

64. (Currently Amended) The method of claim 34 wherein the polysaccharide polymer is covalently bonded to the surface of the inert medical device.

65. (Currently Amended) The method of claim 34 wherein the polysaccharide polymer is bound to the surface of the inert medical device through electrostatic interactions.

66. (Currently Amended) The method of claim 34 further comprising complexing the polysaccharide macromers with a quaternary ammonium cation, and ~~wherein the polysaccharide complex is covalently bonded to the surface and further comprising~~ exposing the covalently bonded polysaccharide complex to a salt solution to decomplex the quaternary ammonium cations from the polysaccharide bound to the surface.

67. (Currently Amended) The method of claim 66 [[34]] wherein the quaternary ammonium cation is chosen from the group consisting of cetyltrimethylammonium chloride, dodecyldimethylbenzylammonium chloride, benzalkonium chloride, didecyldimethylammoniuma chloride, benzethonium chloride, hexyl trimethyl ammonium, decyl trimethyl ammonium, lauryl trimethyl ammonium, myristyl trimethyl ammonium, cetyla trimethyl ammonium, stearyl trimethyl ammonium, didecyl dimethyl ammonium, dilauryl dimethyl ammonium, and distearyl dimethyl ammonium and wherein the organic solvent comprises at least one member of the group consisting of dimethylformamide, dimethylacetamide, dimethyl sulfoxide, hexamethylphosphoric triamide, formic acid, acetonitrile, methanol, ethanol, acetone, acetic acid, dichloromethane, pyridine, and formamide.

68.-94. (Cancelled)

Please add the following new claims:

95. (New) The method of claim 34 comprising attaching monomers to polysaccharides to make polysaccharide macromers and thereafter polymerizing the macromers in an organic solvent into a three-dimensional crosslinked hydrogel that defines the hollow cylinder, wherein the cylinder is formed during polymerization of the polysaccharide macromers.

96. (New) The method of claim 34 comprising attaching monomers to polysaccharides to make polysaccharide macromers and thereafter polymerizing the macromers in an organic solvent into a three-dimensional crosslinked hydrogel that encapsulates the inert medical device in the hydrogel.

97. (New) The method of claim 96 wherein the inert medical device comprises a knitted fabric tube.

98. (New) The method of claim 97 further comprising placing the knitted fabric tube over a mandrel, placing the polysaccharide macromer in contact with the fabric, polymerizing the macromer to form the hydrogel to encapsulate the fabric tube, and removing the hydrogel from the mandrel.

99. (New) The method of claim 98 wherein the polysaccharide comprises heparin, with the hydrogel comprising at least about 50% water content and a heparin activity of at least about 5 units per 100 mm^2 as measured by an antithrombin binding assay.

100. (New) The method of claim 34 wherein polymerizing the macromers comprises free radical polymerization.

101. (New) The method of claim 34 wherein the hydrogel is at least about 500 microns thick.